

## REMARKS/ARGUMENTS

### **A. Status of the Claims**

Claims 32–42 were pending at the time of the Action. Claims 32–35, 37–38, and 40 are amended. Therefore, claims 32–42 are pending.

### **B. The indefiniteness rejections under 35 U.S.C. § 112, second paragraph are overcome.**

Claims 32–42 are rejected under 35 U.S.C. § 112, second paragraph as being indefinite for failing to particularly point out and distinctly claim the subject matter Applicants regard as the invention. Applicants believe that the claims are clear as originally presented, but has amended the claims to further clarify them.

The Examiner rejected claim 32 as being vague and indefinite because “the flow of the mixture” as well as “the mold” lacked sufficient antecedent basis. In claim 32, the phrase “the flow of” was deleted. A prior limitation directed to “the mixture” provides sufficient antecedent basis for “the mixture.” In addition, a limitation directed to “the mold” was amended to read “a sealed mold cavity.” A prior limitation directed to “a sealed mold cavity” provides sufficient antecedent basis for this claim.

The Examiner also rejected claim 32 as vague and indefinite because it is allegedly “unclear which adequate structural element is involved for filling means.” Action at page 3. Applicants have amended claim 32 to remove the limitation directed to filling means. Applicants respectfully submit that this rejection is overcome.

Claim 33 was rejected as vague and indefinite because there is allegedly insufficient antecedent basis for “the flow direction.” Applicants have amended claim 33 to delete the reference to “the flow direction.”

The Examiner rejected claims 34, 35, and 37 as vague and indefinite because they are allegedly “unclear about ‘wherein each vent,’ wherein claims are depended on claim 32 and claim 32 cites limitation of: ‘. . .at least a vent,’ not a plurality of vents, therefore limitation of claims such as ‘wherein each vent . . .’ makes the scope of the subject matter indeterminate.” Action at 3.

Applicants respectfully disagree that claims 34, 35, and 37 are vague and indefinite. Nonetheless, Applicants have amended claims 34, 35, and 37 to amend the limitation of

“wherein each vent” to read “wherein the vent.” Support for this amendment is found in the specification at page 7, lines 25–30: “For this purpose, as represented on figure 6, air evacuation means are provided on the upper side 44 of the cavity 4, for example two small vents 45 provided in the seal 41 surrounding the cavity 4 opening directly in the air or in a space 46 connected to vacuum means.”

The Examiner rejected claim 38 as being vague and indefinite because it is allegedly “unclear which element adapted for the application of a post-injection pressure in the mold cavity after filling.” Action at 3. Applicants have amended claim 38 to further clarify that the molding installation is adapted for the application of a post-injection pressure.

The Examiner rejected claim 41 and 42 as vague and indefinite because claim 40 on which they depend does not cite the limitation of “the flat trapezoidal faces of the enlarging spout.” Action at 3. Applicants have amended claim 40 to provide antecedent basis for the limitation “the flat trapezoidal faces of the enlarging spout.”

Claims 32–35, 37, 38, and 40 have been amended. Applicants respectfully request that the Examiner withdraw his rejections premised on § 112, second paragraph.

**C. The anticipation rejections under 35 U.S.C. § 102(a) and (e) are overcome because Kadota does not disclose each and every element.**

Claims 32–34, 37–38, and 40 are rejected under 35 U.S.C. § 102(a) as being allegedly anticipated by Kadota et al. (WO 03/084728). These claims are also rejected under 35 U.S.C. § 102(e) as being anticipated by Kadota et al. (US 2005/0200033). The rejections under 35 U.S.C. § 102(a) and § 102(e) are respectfully traversed.

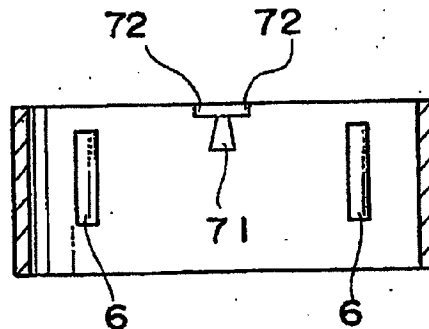
In order to maintain this rejection, it must be shown that the cited references disclose and arrange every element in an identical manner claimed by Applicants. *See In re Bond*, 910 F.2d 831, 832 (Fed. Cir. 1990) (“For a prior art reference to anticipate in terms of 35 U.S.C. § 102, every element of the claimed invention must be identically shown in a single reference. These elements must be arranged as in the claim under review. . . .”). Further, it is incumbent on the Examiner to consider “every limitation” in the claim. MPEP § 2106(II)(C). Applicants respectfully disagree with the position taken by the Examiner.

Regarding claim 32, Kadota does not disclose a “*spout defining a substantially flat space having an axis substantially passing by the center of the mold cavity and being limited*”

*by two flat faces and two diverging sides inclined on either side of the axis and tangentially connecting to the circular shape of the mold cavity.”*

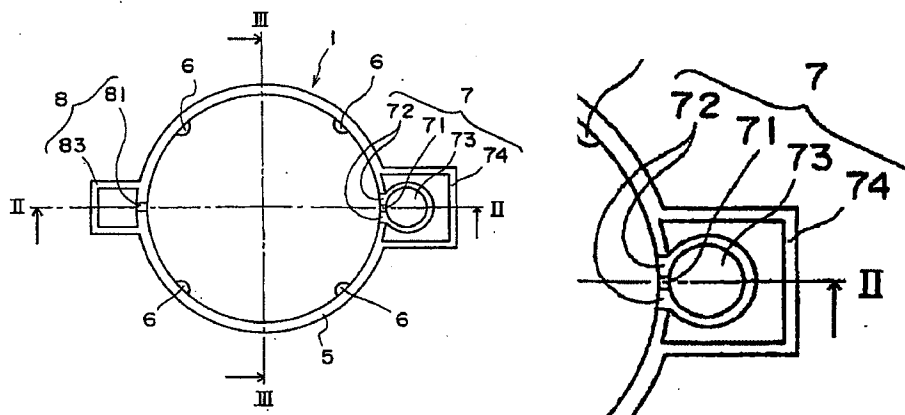
Examiner considers casting groove both-side member (72) to be a spout. Action at page 4. As shown below in Figure 4 of Kadota, the space in the casting groove both-side member (72) is not flat, and the sides of the casting groove both-side member (72) are not inclined.

Fig. 4



Also, as shown below in Figure 1 of Kadota, the casting groove both-side member (72) is not tangentially connected to the circumference of the cylindrical member.

Fig. 1

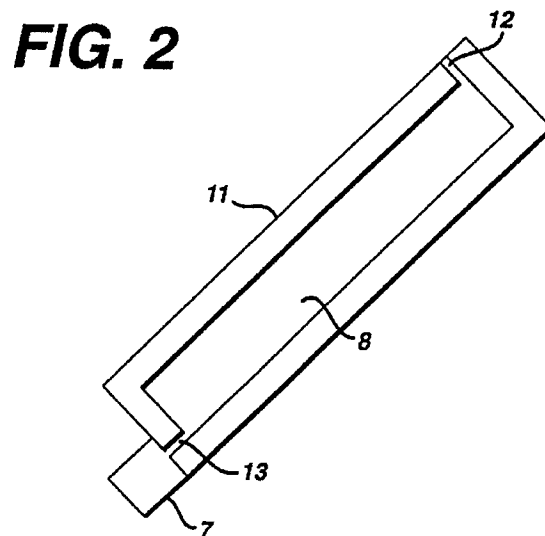


Because Kadota does not disclose and arrange every element in an identical manner claimed by Applicants in claim 32, claim 32 is allowable. *In re Bond*, 910 F.2d at 832. Because claim 32 is allowable, claims 33–34, 37–38, and 40 that depend on claim 32 are also allowable. *Id.*

**D. The anticipation rejections under 35 U.S.C. § 102 (b) are overcome because Hill does not disclose each and every element.**

Claims 32–34, 37–38, and 40 are rejected under 35 U.S.C. § 102(b) as being anticipated by Hill et al. (US 5,656,210). To maintain this rejection, it must be shown that the cited references disclose and arrange every element in an identical manner claimed by Applicant. *See In re Bond*, 910 F.2d 831, 832 (Fed. Cir. 1990). Applicants respectfully disagree with the position taken by the Examiner.

Applicants contend that Hill does not anticipate independent claim 32. First, Hill does not disclose “*a spout connecting the outlet opening of the injection duct to the casting opening of the mold cavity.*” Instead, Hill discloses that the reactive material passes directly from the mixhead (7) to the gate (13), as shown below:



Second, the Examiner defines gate (13) as the spout claimed in the present invention. Action at page 7. Gate (13) does not disclose each limitation directed to the spout, however. Gate (13) is not a “*spout defining a substantially flat space having an axis substantially passing by the center of the mold cavity and being limited by two flat faces and two diverging sides inclined on either side of the axis and tangentially connecting to the circular shape of the mold cavity.*” Referring to the figure shown immediately above, it can be seen that the axis of gate (13) passes substantially by the edge of the mold cavity, not the center. Gate (13) is not limited by two diverging sides inclined on either side of that axis. Furthermore, gate (13) does not connect to any circular shape.

Finally, Hill does not disclose a “**mold cavity being limited by two plates between which is inserted an elongated seal.**” Instead, Hill discloses that a female mold forms the convex front surface of the lens, while a male mold forms the concave back surface. An elongated seal is not disclosed:

**2**

In cast molding, a female mold forms the lens' convex front surface, while a male mold forms the lens' concave back surface. The liquid monomer is placed in the cavity and sealed by the annular contact between the two molds.  
5 Polymerization occurs in the closed cavity, and the polymerized hardened lens is released from the mated molds. The subsequent processing of the lens is similar to the methods used for producing lens by spin casting.

Hill discloses only two pieces that form a seal: the male mold and the female mold. The seal is formed “by the annular contact between the” female mold and the male mold. In contrast, Applicants claim three pieces that form a seal: the two plates that limit the mold cavity and the elongated seal that is inserted between the two plates.

Hill does not disclose and arrange every element in an identical manner claimed by Applicants in claim 32. Claim 32 is therefore allowable. 32. *In re Bond*, 910 F.2d at 832. Because claim 32 is allowable, claims 33–34, 37–38, and 40 that depend on claim 32 are also allowable. *Id.* Applicants respectfully request that the Examiner withdraw his rejections premised on § 102(b).

**E. The obviousness rejections under 35 U.S.C. § 103(a) are overcome because the cited references do not disclose or suggest all elements.**

The Examiner rejects dependent claims 35, 39, and 41–42 as obvious under 35 U.S.C. § 103(a). Claim 35 is rejected under § 103(a) as being unpatentable over Hill in view of Andino et al. (US 2002/0163095), as well as being unpatentable over Kadota et al. in view of Andino. Claim 39 is rejected under § 103(a) as being unpatentable over Hill in view of Su (US 2003/0173692), as well as being unpatentable over Kadota in view of Su. Finally, claims 41–42 are rejected under § 103(a) as being unpatentable over Hill in view of Kudert et al. (US 5,523,045) or Osawa et al. (US 2003/0122281), as well as being unpatentable over Kadota in view of Kudert or Osawa.

Obviousness is determined by analyzing the factors set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 U.S.P.Q. 459 (1966):

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence.

Section 2143.03 of the MPEP requires that the Examiner “consider” every claim feature when making an obviousness determination. To render claims 35, 39, and 41–42 unpatentable, however, the Examiner must do more than merely “consider” each and every feature for this claim. Instead, the asserted combination must also teach or suggest each and every claim feature. *See In re Royka*, 490 F.2d 981, 180 USPQ 580 (CCPA 1974) (to establish prima facie obviousness of a claimed invention, all the claim features must be taught or suggested by the prior art).

Because obviousness is a question of law based on underlying factual inquiries, including “ascertaining the differences between the prior art and the claims at issue,” all claim features must be present in the cited art. *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966). Obviousness requires at least a suggestion of all of the limitations in a claim. *See KSR Int’l v. Teleflex Inc.*, 127 S. Ct. 1727, 1741 (2007); *see also CFMT, Inc. v. Yieldup Intern. Corp.*, 349 F.3d 1333, 1342 (Fed. Cir. 2003) (“obviousness requires a suggestion of all limitations in a claim”) (*citing In re Royka*, 490 F.2d 981, 985 (CCPA 1974)).

As discussed above in the arguments relating to the anticipation rejections, neither Hill nor Kadota disclose or suggest all of the limitations in independent claim 32. For each rejection, the additional art cited by Examiner does not suggest or disclose the claim limitations absent from Hill: “*a spout connecting the outlet opening of the injection duct to the casting opening of the mold cavity;*” “*spout defining a substantially flat space having an axis substantially passing by the center of the mold cavity and being limited by two flat faces and two diverging sides inclined on either side of the axis and tangentially connecting to the circular shape of the mold cavity;*” and “*mold cavity being limited by two plates between which is inserted an elongated seal.*” Nor does the additional art suggest or disclose the claim limitations absent from Kadota: “*spout defining a substantially flat space having an axis substantially passing by the center of the mold cavity and being limited by two flat faces and two diverging sides inclined on either side of the axis and tangentially connecting to the circular shape of the mold cavity.*”

Less than all of the claim limitations for each of claims 35, 39, and 41–42 are disclosed or suggested. Because all claim limitations must be disclosed or suggested to maintain an obviousness rejection, Applicants respectfully contend that claims 35, 39, and 41–42 are not obvious. Each § 103(a) rejection is discussed in greater detail below.

Because independent claim 32 is allowable over Hill and Kadota, and because claims 35, 39, and 41–42 each depend on claim 32, these claims should be allowed. If a parent independent claim is nonobvious, then all dependent claims are also nonobvious. *See Callaway Golf Co. v. Acushnet Co.*, 576 F.3d 1331, 1344 (Fed. Cir. 2009) (“A broader independent claim cannot be nonobvious where a dependent claim stemming from that independent claim is invalid for obviousness.”).

**1. Claim 35 is patentable over Hill in view of Andino.**

The Examiner rejects claim 35 under § 103(a) as being unpatentable over Hill in view of Andino et al. (US 2002/0163095). Applicants respectfully contend that Hill does not disclose or suggest each and every claim limitation in claim 32, on which claim 35 depends. As discussed above, Hill does not disclose or suggest “*a spout connecting the outlet opening of the injection duct to the casting opening of the mold cavity.*” Nor does Hill disclose or suggest a “*spout defining a substantially flat space having an axis substantially passing by the center of the mold cavity and being limited by two flat faces and two diverging sides inclined on either side of the axis and tangentially connecting to the circular shape of the mold cavity.*” Finally, Hill does not disclose or suggest a “*mold cavity being limited by two plates between which is inserted an elongated seal.*”

Andino does not disclose or suggest each claim limitation missing from Hill. Andino does not disclose or suggest a spout connecting the outlet opening of the injection duct to the casting opening of the molding cavity. In fact, Andino does not disclose or suggest a spout of any kind.

Finally, Andino does not disclose or suggest a “mold cavity being limited by two plates between which is inserted an elongated seal.” Rather, Andino teaches a mold cavity that is formed by mold halves only: “A cavity 95 is formed by two mold halves 92 and 94. . . . The mold halves 92,94 *slidably engage one another.*” Andino at Paragraph 0069. “The mold halves 102, 104 are then brought into *engagement with one another.*” Andino at Paragraph 70. “A

cavity 115 is *formed between two mold halves* 112 and 114 . . . .” Andino at Paragraph 71. Andino does not teach or suggest a seal of any kind.

Applicants respectfully submit that because Hill, when viewed in light of Andino, does not disclose or suggest every claim limitation, claim 35 is not obvious. Thus, claim 35 should be allowed.

**2. Claim 35 is patentable over Kadota in view of Andino.**

The Examiner also rejects Claim 35 as unpatentable over Kadota in view of Andino. As discussed above, Kadota does not disclose or suggest a “*spout defining a substantially flat space having an axis substantially passing by the center of the mold cavity and being limited by two flat faces and two diverging sides inclined on either side of the axis and tangentially connecting to the circular shape of the mold cavity.*”

As discussed immediately above, Andino does not disclose or suggest this missing limitation or its equivalents. Applicants respectfully submit that because Kadota, when viewed in light of Andino, does not disclose or suggest every claim limitation, claim 35 is not obvious. Thus, claim 35 should be allowed.

**3. Claim 39 is patentable over Hill in view of Su.**

The Examiner rejects claim 39 under § 103(a) as being unpatentable over Hill in view of Su (US 2003/0173692). Applicants respectfully submit that Hill does not disclose or suggest each and every claim limitation of claim 32, on which claim 39 depends. Nor does Su disclose or suggest each and every claim limitation missing from Hill.

Namely, Su does not disclose or suggest “*a spout connecting the outlet opening of the injection duct to the casting opening of the mold cavity.*” Nor does Su disclose or suggest a “*spout defining a substantially flat space having an axis substantially passing by the center of the mold cavity and being limited by two flat faces and two diverging sides inclined on either side of the axis and tangentially connecting to the circular shape of the mold cavity.*” Finally, Su does not teach or suggest a “*mold cavity being limited by two plates between which is inserted an elongated seal.*”

Because Hill and Su, when viewed together, do not disclose or suggest each and every claim limitation, claim 39 is nonobvious. Therefore, claim 39 should be allowed.



**4. Claim 39 is patentable over Kadota in view of Su.**

The Examiner rejects claim 39 under § 103(a) as being unpatentable over Kadota in view of Su. Kadota does not disclose or suggest each and every claim limitation of claim 32, on which claim 39 depends. Su does not disclose or suggest the elements not disclosed or suggested by Kadota. Because, when viewed together, Kadota and Su disclose or suggest less than all claim elements, claim 39 should be allowed.

**5. Claims 41–42 are patentable over Hill in view of Kudert or Osawa.**

The Examiner rejects claims 41–42 under § 103(a) as being unpatentable over Hill in view of Kudert et al. (US 5,523,045) or Osawa et al. (US 2003/0122281). Hill does not disclose or suggest each and every claim limitation of claim 32, upon which claims 41–42 ultimately depend.

Neither Kudert nor Osawa disclose or suggest the claim limitations absent from Hill. Neither Kudert nor Osawa disclose or suggest “*a spout connecting the outlet opening of the injection duct to the casting opening of the mold cavity.*” Nor do Kudert or Osawa disclose or suggest a “*spout defining a substantially flat space having an axis substantially passing by the center of the mold cavity and being limited by two flat faces and two diverging sides inclined on either side of the axis and tangentially connecting to the circular shape of the mold cavity.*” Finally, these references does not teach or suggest a “*mold cavity being limited by two plates between which is inserted an elongated seal.*”

Because, when viewed together, Hill and Kudert or Osawa disclose or suggest less than all claim elements, claims 41–42 should be allowed.

**6. Claims 41–42 are patentable over Kadota in view of Kudert or Osawa.**

The Examiner rejects claims 41–42 under § 103(a) as being unpatentable over Kadota in view of Kudert et al. (US 5,523,045) or Osawa et al. (US 2003/0122281). Kadota does not disclose or suggest each and every claim limitation of claim 32, upon which claims 41–42 ultimately depend.

Neither Kudert nor Osawa disclose or suggest the claim limitations absent from Kadota. Neither Kudert nor Osawa disclose or suggest a “*spout defining a substantially flat space having an axis substantially passing by the center of the mold cavity and being limited by two*

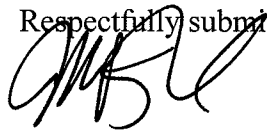
*flat faces and two diverging sides inclined on either side of the axis and tangentially connecting to the circular shape of the mold cavity.”*

Because, when viewed together, Kadota and Kudert or Osawa disclose or suggest less than all claim elements, claims 41–42 should be allowed.

**F. Conclusion**

Applicants believe that the present document is a complete response to the Office Action. The present case is in condition for allowance and such favorable action is requested. The Examiner is invited to contact the undersigned attorney at (512) 536-3043 with any questions, comments or suggestions relating to the referenced patent application.

Respectfully submitted,



Mark B. Wilson  
Reg. No. 37,259  
Attorney for Applicants

FULBRIGHT & JAWORSKI L.L.P.  
600 Congress Avenue, Suite 2400  
Austin, Texas 78701  
512.536.3035 (voice)  
512.536.4598 (fax)

Date: May 3, 2010